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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/628,226

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Jurgis Astrauskas

1007-0562

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7590

07/10/2008

Maginot, Moore & Beck LLP  
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EXAMINER

TRAN, DZUNG D

ART UNIT

PAPER NUMBER

2613

MAIL DATE

DELIVERY MODE

07/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/628,226	<b>Applicant(s)</b> ASTRAUSKAS, JURGIS	
	<b>Examiner</b> Dzung D. Tran	<b>Art Unit</b> 2613	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Specification*

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merkle et al. U.S. Patent no. 5,442,344 in view of Ishiguro et al. U.S. Patent no. 4,935,613.

Regarding claims 1, 9 and 13, Merkle discloses in Figure 2, an apparatus for bi-directional optical communication with a device external to the probe, the probe comprising:

an optical transmitter for mounting in proximity to an external device, the optical transmitter generates light pulses in accordance with a data signal (Figure 3, col. 3, lines 28-47); and

an optical receiver for mounting in proximity to the external device, the optical receiver including a sensitive phototransistor for generating an electrical data signal from a visible light data signal impinging upon the optical receiver (Figure 3, col. 3, lines 28-47).

Merkle does not specifically disclose the optical transmitter including a high intensity light emitting diode (LED).

Ishiguro discloses in col. 7, lines 18-21 a high intensity light emitting diode that generates a high intensity pulse.

At the time of the invention was made, one of ordinary skill in the art would have been obvious to replace the well known high intensity light emitting diode (LED) taught by Ishiguro with the LED D2 in the apparatus of Merkle. One of ordinary skill in the art would have been motivated to do that in order to illuminate the super bright light which is more visible than a normal LED.

Regarding claims 2, 11 and 14, whether or not to set the high intensity LED generates light more intense than the light generated by an indicator light of an appliance is merely an engineering design choice. At the time of the invention was made, one of ordinary skill in the art would have been motivated to do that in order to meet the requirement of the apparatus.

Regarding claims 3, 10 and 15, wherein the high intensity LED generates light that is more intense than a standard LED is well known in the art.

Regarding claims 4, 12 and 16, Examiner takes official notice that it is well known in the art that a high intensity LED generates light in the range of approximately 8000 millicandelas to approximately 31,000 millicandelas (see Baker U.S. Patent no. 7,019,492).

Regarding claim 5, Examiner take an official notice that the optical receiver comprising: a sensitive phototransistor for generating the electrical data signal is well known in the art (see Lewis U.S. Patent no. 7,002,131).

Regarding claims 6, 8, 17 and 18, Merkle discloses the probe optical receiver for converting a light data signal from a light emitter 40. Thus, whether the probe optical receiver generates a collector photo current approximately 5 to 15 mA in response to a visible light pulse of 100 lx or the sensitive phototransistor is stimulated to generate current in response to light in the range of 10 to 30 lx is merely an engineering design choices.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merkle et al. U.S. Patent no. 5,442,344 in view of Lewis U.S. Patent no. 7,002,131.

Regarding claim 7, Merkle discloses in Figure 2, an apparatus for bi-directional optical communication with a device external to the probe, the probe comprising:

an optical transmitter for mounting in proximity to an external device, the optical transmitter generates light pulses in accordance with a data signal (Figure 3, col. 3, lines 28-47); and

an optical receiver for mounting in proximity to the external device, the optical receiver (i.e., photodiode) for generating an electrical data signal from a visible light data signal impinging upon the optical receiver (Figure 3, col. 3, lines 28-47). Merkle does not specifically disclose the optical receiver including a sensitive phototransistor.

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Lewis discloses in col. 7, lines 30-38 that the optical receiver can be a photo-transistor. At the time of the invention was made, one of ordinary skill in the art would have been obvious to replace the well known phototransistor taught by Lewis with the photodiode in the apparatus of Merkle. One of ordinary skill in the art would have been motivated to do that in order to receive the high intensity signal from the transmitter.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran  
03/21/2008

/Dzung D Tran/

Primary Examiner, Art Unit 2613